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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,318	07/30/2001	Joo Yeol Lee	P-217	8002
34610	7590	01/13/2006	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			LEE, JOHN J	
			ART UNIT	PAPER NUMBER
			2684	

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/916,318	Applicant(s) LEE, JOO YEOL	
	Examiner JOHN J. LEE	Art Unit 2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 and 27-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-11, 18-25, 27-31, 33 and 34 is/are allowed.
- 6) ☒ Claim(s) 12-17, 32, and 35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. **Claims 12 – 17** are rejected under **35 U.S.C. 112, first paragraph**, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Re claims 12 and 15, the newly added limitation “the WLL transmitting processor and WLAN receiving processor share a phase locked loop” **was not described in the specification** in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

More specifically, the specification only discloses “WLL and WLAN transceiver apparatus shares such components as the first and second antennas, the phase locked loop”, **not the WLL transmitting processor and WLAN receiving processor**.

Therefore, the amended limitation has not been identified or recognized by the disclosure in the specification.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 32, and 35** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima et al. (US Patent number 6,640,100) in view of Georges et al. (US Patent number 6,014,546).

Regarding **claim 32**, Kojima discloses that a system for providing a core network access via a wireless local area network (Fig. 2, 3 and column 4, lines 59 – column 5, lines 65). Kojima teaches that WLL base station (7 in Fig. 2) connected to the core network (5 through 3 in Fig. 2) (column 4, lines 59 – column 5, lines 25 and Fig. 2, where teaches the WLL base station connected to the network, base station controller). Kojima teaches that a plurality of devices (12 in Fig. 2) connected in a wireless LAN (column 4, lines 59 – column 5, lines 37 and Fig. 2, where teaches a plurality of wireless mobile device connected in a wireless LAN, wireless repeater, base station). Kojima teaches that a single integrated apparatus (antenna or could be anything) for transferring data from the WLL base station (7 in Fig. 2) to or from the plurality of devices (mobile repeater station, base stations, or fixed subscriber stations) connected to the WLAN (base station controller through PSTN or mobile wireless repeaters through mobile stations), said single integrated apparatus (antenna or could be anything) including means for translating the data between a WLAN signaling protocol and a WLL signaling protocol (Fig. 2, 4

and column 5, lines 1 – column 6, lines 34, where teaches an WLL base station antenna unit transmits/receives communication data signal to/from wireless mobile base station or repeaters with wireless mobile stations, and communicates to the plurality fixed subscriber stations with fixed terminal such that wired telephones, and then the base station performs to analyze the communication signal to connect to the WLL or WLAN signaling protocol).

Kojima does not exactly disclose the limitation “translating the data between a WLAN signaling protocol and WLL signaling protocol”. However, Georges discloses the limitation “translating the data between a WLAN signaling protocol and WLL signaling protocol” (Fig. 15, column 13, lines 1 – 65, where teaches the WLL base station performs WLL service that is particularly practical in providing telephone services to regions, and alternatively, connection could be to wireless local area network type of communication service for more advanced services). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Kojima system as taught by Georges. Doing so would achieve enhancing advanced telephone connection signaling service in wireless communication system.

Regarding **claim 35**, Kojima and Georges disclose the all the limitation, as discussed in claim 32. Furthermore, Kojima further discloses that the antenna unit applies received signals to a WLL transceiver and to the WLAN transceiver (Fig. 2, 3 and column 5, lines 1 – 64, where teaches an antenna unit receives/transmits the radio signal from/to plurality of WLAN terminals, and an antenna unit transmits/receives the radio signal to/from WLL base station, and the repeater inherently has a processor (main

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controller) and each of WLL transceiver section and WLAN transceiver section has a processing section for processing the signals).

Allowable Subject Matter

5. Claims 1-11, 18-25, 27-31, 33, and 34 are allowed.

Claims 1-11, 18-25, 27-31, 33, and 34 are allowable over the prior art of record because a search does not detect the combined claimed elements as set forth in the claims 1-11, 18-25, 27-31, 33, and 34.

As recited in independent claims 1 and 18, none of the prior art of record teaches or fairly suggests that a WLAN reception and transmission processing section adapted to receive the radio signal from the plurality of WLAN terminals and digital baseband processor, and perform a predetermined reception and transmission process for the received radio signal for application to the digital baseband processor of the WLL transceiver section and for radio transmission to WLAN terminals, a medium access controller (MAC) adapted to supply the signal applied thereto from the digital baseband processor to the WLAN transmission processing section or supply the signal applied thereto from the WLAN reception processing section to the digital baseband processor of the WLL transceiver section, and also, a antenna unit including a first antenna for receiving the radio signal from WLL base station and the first antenna for receiving the radio signal from one of the WLAN terminals, and antenna unit applying the received radio signal the WLL transceiver section or the WLAN transceiver section, and together with combination of other element as set forth in the claims 1-11, 18-25, 27-31, 33, and

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34. Therefore, claims 1-11, 18-25, 27-31, 33, and 34 are allowable over the prior art of records.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lee et al. (US Patent number 6,393,280) discloses Radio Interface unit and Method of Cortrolling Multiple/Single Mode In Wireless Local Loop System.

Warden et al. (US Patent number 6,741,857) discloses Access for Wireless Local Loop Telephone Network.

Information regarding...Patent Application Information Retrieval (PAIR) system... at 866-217-9197 (toll-free)."

Any response to this action should be mailed to:

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Or P.O. Box 1450
Alexandria VA 22313

or faxed (703) 308-9051, (for formal communications intended for entry)

Or: (703) 308-6606 (for informal or draft communications, please label "PROPOSED" or "DRAFT").


Hand-delivered responses should be brought to USPTO Headquarters, Alexandria, VA.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John J. Lee** whose telephone number is **(571) 272-7880**. He can normally be reached Monday-Thursday and alternate Fridays from 8:30am-5:00 pm. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, **Nay Aung Maung**, can be reached on **(571) 272-7882**. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

J.L
January 7, 2006

John J Lee

1/10/06

TILAHUN GESESSE
PRIMARY EXAMINER